AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF	PAGES
J	1	12

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO.(If applicable)
0003	12-Jan-2004	W33SJG-3212-7917	

6. ISSUED BY	CODE	7. ADMINISTERED BY (If other than item 6)	CODE
US ARMY ENGINEER DISTRICT SAVANNAH 100 W OGLETHORPE AVENUE SAVANNAH GA 31401-3640	W912HN	**See Item 6**	

8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)		
	X	9A. AMENDMENT OF SOLICITATION NO. DACW21-03-B-0011
	X	9B. DATED (SEE ITEM 11) 25-Nov-2003
		10A. MOD. OF CONTRACT/ORDER NO.
		10B. DATED (SEE ITEM 13)

CODE FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer [ ] is extended, [X] is not extended.

Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS.
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

[ ] A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

[ ] B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).

[ ] C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

[ ] D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor [ ] is not, [ ] is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SUBJ: Richard B. Russell Powerplant Static Strt Frequency Installation

1. This amendment is being issued to add a section left out of the original solicitation, to set an end date for submission of all questions, and to change point of contact information.

2. Section 03370 CONCRETE is hereby incorporated as a textual attachment.

3. The end date for submission of all questions is set for January 16, 2004. All questions submitted will be answered by an amendment to be issued on or about February 2, 2004.

4. Point of contact is changed from Faith V. Shelton to R. Faye Hazelwood, russette.f.hazelwood@sas02.usace.army.mil, phone 1-912-652-5619.

5. All other aspects of the solicitation remain the same.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) TEL: EMAIL:	
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)	16C. DATE SIGNED 12-Jan-2004

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SECTION SF 30 - BLOCK 14 CONTINUATION PAGE

The following have been added by full text:

SECTION 03370

SECTION 03307

CONCRETE

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SECTION 03307

CONCRETE

PART 1 GENERAL

1.1 GENERAL INFORMATION

The work covered by this section is to be accomplished on the Service deck, El. 350. It consists of mixing, delivering, and placing shrinkage-compensating concrete to fill four abandoned bus openings, concrete for new support pedestals and for new curbs at four new bus openings, and non-shrink grout for filling abandoned pipe penetrations and concrete surface damage.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ACI INTERNATIONAL (ACI)

ACI 308	(1992) Standard Practice for Curing Concrete
ACI 318/318R	(1999) Building Code Requirements for Reinforced Concrete
ACI 318M/318RM	(1999) Building Code Requirements for Reinforced Concrete (Metric)
ACI 347R	(1994) Formwork for Concrete

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 615	(1995a) Deformed and Plain Billet Bars for Concrete Reinforcement
ASTM C 31	(1991) Making and Curing Concrete Test Specimens in the Field
ASTM C 33	(1999) Concrete Aggregate
ASTM C 39	(1993) Compressive Strength of Cylindrical Concrete Specimens
ASTM C 94	(1994) Ready-Mixed Concrete
ASTM C 143	(1990a) Slump of Hydraulic Cement Concrete
ASTM C 150	(1998) Portland Cement
ASTM C 171	(1997) Sheet Materials for Curing Concrete

ASTM C 172	(1990) Sampling Freshly Mixed Concrete
ASTM C 183	(1990) Methods of Sampling and Acceptance of Hydraulic Cement
ASTM C 231	(1991b) Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C 260	(1994) Air-Entraining Admixtures for Concrete
ASTM C 309	(1994) Liquid Membrane-Forming Compounds for Curing Concrete
ASTM C 494	(1992) Chemical Admixtures for Concrete
ASTM C 845	(1998) Expansive Hydraulic Cement
ASTM D 75	(1987; R 1992) Sampling Aggregates
ASTM D 98	(1993) Calcium Chloride
ASTM E 96	(1995) Water Vapor Transmission of Material Corps of Engineers (COE)
COE CRD-C 400	(1963) Requirements for Water for Use in Mixing or Curing Concrete

1.3 SUBMITTALS

Government approval is required for all submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with SECTION 01330:

SD-01 Data

Air-Entraining Admixtures; Curing Materials; Expansive Hydraulic Cement; Reinforcing Steel; FIO

Manufacturer's literature demonstrating compliance with applicable specifications for the above materials, 30 days prior to the first concrete placement.

Conveying and Placing Concrete; FIO

The methods and equipment for transporting, handling, depositing, and consolidating the concrete, 30 days prior to the first concrete placement.

SD-04 Drawings

Service Deck Loading; GA

The loading to be applied to the deck during the concreting operation, 30 days prior to the first concrete placement.

SD-06 Statements

Testing Laboratory; GA

The laboratory to perform concrete and materials testing, 30 days prior to the first concrete placement.

Formwork; FIO

Formwork design, 30 days prior to the first concrete placement.

SD-09 Reports

Concrete Mixture Proportions; FIO

Mixture proportions that will produce concrete of the quality required and applicable test reports verifying that the concrete mixture proportions selected will produce concrete of the quality specified, 30 days prior to the first concrete placement.

Cementitious Materials; FIO

Mill test reports stating that the material(s) meet the requirements of the specification under which it is furnished, 30 days prior to the first concrete placement.

Aggregates; FIO

Test reports showing the material(s) meet the quality and grading requirements of the specifications, 30 days prior to the first concrete placement.

SD-13 Certificates

Cementitious Materials; FIO

Certificates of compliance attesting that the concrete materials meet the requirements of the specifications, 30 days prior to the first concrete placement.

Aggregates; FIO

Certificates of compliance showing the material(s) meet the quality and grading requirements of the specifications, 30 days prior to the first concrete placement.

1.4 DESIGN AND PERFORMANCE REQUIREMENTS

1.4.1 General

The Government will maintain the option to sample and test aggregates, cement, and concrete to determine compliance with the specifications. The Contractor shall provide facilities and labor as may be necessary to assist the Government in procurement of representative test samples. Samples of aggregates will be obtained at the point of batching in accordance with ASTM

D 75. Concrete will be sampled in accordance with ASTM C 172. Slump and air content will be determined in accordance with ASTM C 143 and ASTM C 231, respectively, when cylinders are molded. Compression test specimens will be made, cured, and transported in accordance with ASTM C 31. Compression test specimens will be tested in accordance with ASTM C 39. Samples for strength tests will be taken not less than once each shift in which concrete is produced from each class of concrete required. A minimum of three (3) specimens will be made from each sample; two (2) will be tested at 28 days for acceptance, and one(1) will be tested at 7 days for information.

1.4.2 Strength

Specified compression strength of 4000 psi shall be obtained at 28 days. Acceptance test results will be the average strengths of two(2) specimens tested at 28 days. The strength of the concrete will be considered satisfactory so long as the average of three consecutive acceptance test results equal or exceed the specified compressive strength, f'c, and no individual acceptance test result falls below f'c by more than 500 psi.

1.4.3 Surface Finish Requirements

A Class "B" finish shall apply to all surfaces. The surface requirements shall be as specified in ACI 347R..

1.4.4 Construction Tolerances

Variation of the constructed linear outline from established position in plan shall be no greater than 1/8 inch. Variation from level for curbs shall be no more than 1/8 inch in total length. Variation from level for bus opening replacement shall be no more than 1/16 inch off the existing deck slope in total length. If more stringent tolerances are specified on the drawings, the tolerances on the drawings shall govern.

1.4.5 Concrete Mixture Proportions

Concrete mixture proportions shall be the responsibility of the Contractor. Mixture proportions shall include the dry weights of cementitious material; the nominal maximum size of the coarse aggregate; the specific gravities, absorptions, and saturated surface-dry weights of fine and coarse aggregates; the quantities, types, and names of admixtures; and quantity of water per cubic yard of concrete. All materials included in the mixture proportions shall be of the same type and from the same source as will be used on the project. Specified compressive strength f'c shall be 4,000 psi at 28 days. The maximum nominal size coarse aggregate shall be 1 1/2 inch, in accordance with ACI 318/318R. The air content shall be between 4.5 and 7.5 percent. The slump shall be between 2 and 5 inches. The maximum water cement ratio shall be 0.50.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Cementitious Materials

Cementitious materials shall conform to the appropriate specifications listed:

Portland Cement. ASTM C 150, Type IIA, low alkali.

Expansive Hydraulic Cement: ASTM C 845

2.1.2 Aggregates

Aggregates shall meet the quality and grading requirements of ASTM C 33 Class Designations 4M or better.

2.1.3 Admixtures

Admixtures to be used, when required or approved, shall comply with the appropriate specification listed. Chemical admixtures that have been in storage at the project site for longer than 6 months or that have been subjected to freezing shall be retested at the expense of the contractor at the request of the Contracting Officer and shall be rejected if test results are not satisfactory.

Air-entraining admixture shall meet the requirements of ASTM C 260

Water Reducing Agent (WRA) shall meet the requirements of ASTM C 94, Type A or D.

2.1.4 Water

Water for mixing and curing shall be fresh, clean, potable, and free from injurious amounts of oil, acid, salt, or alkali, except that unpotable water may be used if it meets the requirements of COE CRD-C 400.

2.1.5 Formwork

The design and engineering of the formwork as well as its construction, shall be the responsibility of the Contractor.

2.1.6 Form Coatings

Forms for exposed surfaces shall be coated with a nonstaining form oil, which shall be applied shortly before concrete is placed.

2.1.7 Curing Materials

Curing materials shall conform to the following requirements:

Impervious sheet material, ASTM C 171, type optional, except polyethylene film, if used, shall be white opaque.

Membrane-Forming Curing Compound, ASTM C 309, Type 1-D or, Class A

PART 3 EXECUTION

3.1 PREPARATION

3.1.1 General

Surfaces against which concrete is to be placed shall be prepared to expose coarse aggregate, and the surface shall be clean, damp, and free of laitance. Snow, ice, standing or flowing water, loose particles, debris, and foreign matter shall have been removed. Spare vibrators shall be available. The entire preparation shall be accepted by the Government prior to placing.

3.1.2 Embedded Items

Reinforcement shall be secured in place; joints, anchors, and other embedded items shall have been positioned. Internal ties shall be arranged so that when the forms are removed all metal will be not less than 2 inches from concrete surfaces permanently exposed to view or exposed to water on the finished structures. Embedded items shall be free of oil and other foreign matters such as loose coatings or rust, paint, and scale. The embedding of wood in concrete will be permitted only when specifically authorized or directed. All equipment needed to place, consolidate, protect, and cure the concrete shall be at the placement site and in good operating condition.

3.1.3 Formwork Installation

Forms shall be properly aligned, adequately supported, and mortar-tight. The form surfaces shall be smooth and free from irregularities, dents, sags, or holes when used for permanently exposed faces. All exposed joints and edges shall be chamfered, unless otherwise indicated.

3.1.4 Production of Concrete

Ready-Mixed Concrete. Ready mix concrete shall conform to ASTM C 94 except as otherwise stated.

Preparation of existing concrete surfaces. See SECTION 03600, paragraph 3.1.4.

3.2 CONVEYING AND PLACING CONCRETE

Conveying and placing concrete shall conform to the following requirements:

3.2.1 General

Concrete placement shall not be permitted when weather conditions prevent proper placement and consolidation without approval. When concrete is mixed and/or transported by a truck mixer, the concrete shall be delivered to the site of the work and discharge shall be completed within 1-1/2 hours, 45 minutes when the placing temperature is greater than 85 degrees F, or greater if a retarding admixture is used. Concrete shall be conveyed from the mixer to the forms as rapidly as practicable by methods which prevent segregation or loss of ingredients. Concrete shall be in place and consolidated within 15 minutes after discharge from the mixer. Concrete shall be deposited as close as possible to its final position in the forms and be so regulated that it may be effectively consolidated in horizontal layers 18 inches or less in thickness with a minimum of lateral movement. The placement shall be carried on at such a rate that the formation of cold joints will be prevented.

3.2.2 Consolidation

The concrete placement shall be consolidated by rodding, spading, or internal vibrating equipment. Internal vibration shall be systematically accomplished by inserting the vibrator through the fresh concrete in the layer below at a uniform spacing over the entire area of placement. The distance between insertions shall be approximately 1.5 times the radius of action of the vibrator and overlay the adjacent, just-vibrated area by a few inches. The vibrator shall penetrate rapidly to the bottom of the layer and at least 6 inches into the layer below, if such a layer exists. It shall be held stationary until the concrete is consolidated and then withdrawn slowly at the rate of about 3 inches per second.

3.2.3 Cold-Weather Requirements

No concrete placement shall be made when the ambient temperature is below 35°F or if the ambient temperature is below 40°F and falling. Suitable covering and other means as approved shall be provided for maintaining the concrete at a temperature of at least 50°F for not less than 72 hours after placing and at a temperature above freezing for the remainder of the curing period. Salt, chemicals, or other foreign materials shall not be mixed with the concrete to prevent freezing. Any concrete damaged by freezing shall be removed and replaced at the expense of the Contractor.

3.2.4 Hot-Weather Requirements

When the rate of evaporation of surface moisture, as determined by use of Figure 1 of ACI 308, is expected to exceed 0.2 pound per square foot per hour, provisions for windbreaks, shading, fog spraying, or covering with a light-colored material shall be made in advance of placement, and such protective measures shall be taken as quickly as finishing operations will allow.

3.3 FORM REMOVAL

Forms and shoring for the shrinkage compensating concrete used to fill the four abandoned bus openings shall remain in place for 7 days. Forms for curbs and pedestals shall remain in place for 24 hours. When conditions on the work are such as to justify the requirement, forms will be required to remain in place for longer periods.

3.4 FINISHING

3.4.1 Finishing Formed Surfaces

All fins and loose materials shall be removed, and surface defects including tie holes shall be filled. All honeycomb areas and other defects shall be repaired. All unsound concrete shall be removed from areas to be repaired. Surface defects greater than 1/2 inch in diameter and holes left by removal of tie rods in all surfaces not to receive additional concrete shall be reamed or chipped and filled with dry-pack mortar. The prepared area shall be brush-coated with an approved epoxy resin or latex bonding compound or with a neat cement grout after dampening, and filled with mortar or concrete. The cement used in mortar or concrete for repairs to all surfaces permanently exposed to view shall be a blend of Portland cement and white cement so that the final color when cured will be the same as adjacent concrete.

3.4.2 Finishing Unformed Surfaces

The finished surfaces shall be trowel finished. Troweling shall be done to provide a smooth, even, dense finish free from blemishes including trowel marks. The finished surface shall be protected from damage during the construction period. Finishing shall not be performed while there is excess moisture or bleeding water on the surface. No water or cement shall be added to the surface during finishing.

3.5 CURING AND PROTECTION

Beginning immediately after placement and continuing for at least 7 days, all concrete shall be cured and protected from premature drying, extremes in temperature, rapid temperature change, freezing, mechanical damage, and exposure to rain or flowing water. All materials and equipment needed for adequate curing and protection shall be available and at the site of the placement prior to the start of concrete placement. Preservation of moisture for concrete surfaces not in contact with forms shall be accomplished by one of the following methods:

a. Continuous sprinkling or ponding.
b. Application of absorptive mats or fabrics kept continuously wet.
c. Application of sand kept continuously wet.
d. Application of impervious sheet material conforming to ASTM C 171.
e. Application of membrane-forming curing compound conforming to ASTM C 309, Type 1-D, on surfaces permanently exposed to view and Type 2 on other surfaces shall be accomplished in accordance with manufacturer's instructions.

The preservation of moisture for concrete surfaces placed against wooden forms shall be accomplished by keeping the forms continuously wet for 7 days. If forms are removed prior to end of the required curing period, other curing methods shall be used for the balance of the curing period. During the period of protection removal, the temperature of the air in contact with the concrete shall not be allowed to drop more than 25°F within a 24 hour period.

Concrete placed to fill the four abandoned bus opening holes shall be protected from traffic and other heavy loadings by barricading for a period of 28 days after placement.

3.6 TESTS AND INSPECTIONS

3.6.1 General

The individuals who sample and test concrete as required in this specification shall have demonstrated a knowledge and ability to perform the necessary test procedures equivalent to the ACI minimum guidelines for certification of Concrete Field Testing Technicians, Grade I. Credentials of the concrete testing laboratory shall be submitted for approval

3.6.2 Inspection Details and Frequency of Testing

a. Preparations for Placing. Prepared concrete surfaces, forms, and embedded items shall be inspected in sufficient time prior to each concrete placement by the Contractor to certify that it is ready to receive concrete.

b. Air Content. Air content shall be checked at least once during each shift that concrete is placed. Samples shall be obtained in accordance with ASTM C 172 and tested in accordance with ASTM C 231. Air content shall be as specified in paragraph 1.4.5 of this SECTION.

c. Slump. Slump shall be checked once during each shift that concrete is produced. Samples shall be obtained in accordance with ASTM C 172 and tested in accordance with ASTM C 143. Slump shall be as specified in paragraph 1.4.5 of this SECTION.

d. Consolidation and Protection. The Contractor shall ensure that the concrete is properly consolidated, finished, protected, and cured.

e. Temperature. The temperature of the concrete shall be measured when compressive strength specimens are fabricated. Measurement shall be in accordance with ASTM C 1064. The temperature shall be reported along with the compressive strength data.

f. Strength.

(1). Frequency of Testing. Samples for strength tests of concrete placed each day shall be taken not less than once a day. If this sampling frequency results in less than 5 strength tests for a given class of concrete, tests shall be made from at least 5 randomly selected trucks or from each truck if fewer than 5 truck loads are used. Field cured specimens for determining form removal time or when a structure may be put in service shall be made in numbers directed to check the adequacy of curing and protection of concrete in the structure. The specimens shall be removed from the molds at the age of 24 hours and shall be cured and protected, insofar as practicable, in the same manner as that given to the portion of the structure the samples represent.

(2). Testing Procedures. Cylinders for acceptance tests shall be molded and cured in accordance with ASTM C 31. Cylinders shall be tested in accordance with ASTM C 39. A strength test shall be the average of the strengths of two cylinders made form the same sample of concrete and tested at 28 days or at another specified test age.

(3). Evaluation of Results. Concrete specified on the basic of compressive strength will be considered satisfactory if the averages of all sets of three consecutive strength test results equal or exceed the specified strength and no individual strength test result falls below the required strength by more than 500 psi.

3.6.3 Action Required

a. Placing. The placing foreman shall not permit placing to begin until he has verified that an adequate number of acceptable vibrators, which are in working order and have competent operators, are available.

b. Air Content. Whenever a test result is outside the specification limits, the concrete shall not be delivered to the forms and an adjustment shall be made to the dosage of the air-entrainment admixture.

c. Slump. Whenever a test result is outside the specification limits, the concrete shall not be delivered to the forms and an adjustment should be

made in the batch weights of water and fine aggregate. The adjustments are to be made so that the water-cement ratio does not exceed that specified in the submitted concrete mixture proportion.

3.6.4 Reports

The results of all tests and inspections conducted at the project site shall be reported informally at the end of each shift and in writing weekly and shall be delivered within 3 days after the end of each weekly reporting period. See SECTION 01451.

SECTION 00010 - SOLICITATION CONTRACT FORM

The 'issued by' organization has changed from

US ARMY ENGINEER DISTRICT SAVANNAH
ATTN: CT-P/FAITH SHELTON
100 WEST OGLETHORPE AVENUE
SAVANNAH GA 31401-3640

to

US ARMY ENGINEER DISTRICT SAVANNAH
ATTN: FAYE HAZELWOOD
100 W. OGLETHORPE AVENUE
SAVANNAH GA 31401-3640

(End of Summary of Changes)